



GARLAND BAUCH
CHAIRMAN, 2000-2001

American Institute of Aeronautics and Astronautics
HOUSTON SECTION • P.O. Box 57524 • Webster, Texas 77598

Monday, January 29, 2001

**APOLLO 13:
LESSONS IN SAFETY,
QUALITY, & MANAGEMENT**

**OWEN C. BROWN (Ph.D.)
Senior Systems Engineer
Space Systems/Loral
(AIAA Distinguished Lecturer)**



PROGRAM / PRESENTER

This presentation offers a unique look into the Apollo 13 mission. Using an entertaining multimedia approach, an explanation of what happened to the Apollo 13 spacecraft while it was 200,000 miles from Earth will be provided. The recovery operation using the Lunar Module will be detailed, providing information on how close the "lifeboat" came to running out of important supplies. Finally, the events which caused the failure of Apollo 13 will be recounted. The mistakes detailed will offer many lessons to be learned - vital lessons that must be applied today. With these lessons, comes the confirmation of the need for a systems approach to engineering, a coherent "design for safety" philosophy, the requirement to believe warning signs, the utility of a quality system, and the role of individual attitude and human performance on safety and quality. The story is told from the perspective of a nuclear submariner who became a spacecraft engineer. Mr. Owen reveals concepts which have resulted in the enviable safety and quality of the US submarine fleet for the last 45 years. These same concepts must be instilled into the spacecraft industry today.

Owen Brown served six years in the US Navy as a nuclear-trained submarine officer. He later earned a Ph.D. at Stanford, and has six years of spacecraft experience at Space Systems/Loral, where he is currently assigned as a Senior Systems Engineer. CDR Brown also serves in the USNR as an Engineering Duty Officer.

AGENDA

6:00 pm	Social / Light Snacks
7:00 pm	Presentation

***** FREE PROGRAM *****

**University of Houston - Clear Lake
Bayou Building Atrium I/Theater
2700 Bay Area Blvd**

ALL ARE WELCOME

NO RESERVATIONS ARE REQUIRED FOR ATTENDING THIS PROGRAM.

PARKING IS AVAILABLE BEHIND THE BAYOU BUILDING IN THE VISITOR'S LOT AT NO COST.

NO PARKING TOKENS ARE REQUIRED.

LEARN MORE ABOUT THE AIAA HOUSTON SECTION AT <www.jsc.nasa.gov/aiaa>.